

Date: Wed, 4 May 94 04:30:11 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #131
To: Ham-Ant

Ham-Ant Digest Wed, 4 May 94 Volume 94 : Issue 131

Today's Topics:

50-ohm Coax For A'Buryin
Antenna on Saturn
Formula for determining (2 msgs)
HB9CV
Idea, 10-10 members....
kites <--> antennas ?
Vertical Antenna Recommendations?
Vertical Antenna Recommendations?DIR
Y'all are a shy bunch, aintcha'?

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 27 Apr 1994 22:26:00 GMT
From: tymix.Tymnet.COM!niagara!flanagan@uunet.uu.net
Subject: 50-ohm Coax For A'Buryin
To: ham-ant@ucsd.edu

There was a recent posting that mentioned a particular type
of 50-ohm coax that was good to use when it had to be buried
underground and left there. Something about it having a special
jacket that resisted moisture and other ground contaminants.

Unfortunately, I have searched back through our News archives
and I can't locate it. Does anyone remember the manufacturer
or model number of this coax?

Dick

--

Dick Flanagan, W6OLD
dick@libelle.com

w6old@n6qmy.#nocal.ca.usa.na
CIS:73672,751 GEnie:FLANAGAN

Date: Mon, 2 May 94 22:55:00 -0600
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!
news.acns.nwu.edu!news.eecs.nwu.edu!fidogate.nuars.nwu.edu!nwugate.fidonet.org!
f747.n115.z1.fidonet.org!@ihnp4.ucsd.edu
Subject: Antenna on Saturn
To: ham-ant@ucsd.edu

kl> DO NOT DRILL A HOLE IN THE ROOF OF YOUR SATURN AUTOMOBILE!

kl> The roof material on the sedan and sports coupe is aluminum.
kl> I was advised by a fellow Saturn owner and ham, that he has researched
kl> this issue with the factory, etc. and was told not to do it. The

kl> The Saturn station wagons (first introduced in 1993) have polymer
kl> roofs (like the bodies on the Saturns). I would not recommend mounting
kl> anything on this, as it is flexible!
kl> ps I have 2 of these great cars.

How great can a car be if its made out of such flimsy material?

But I agree--- Buy an American car! Too bad we can't really do that with
our radios too!

A through-the-glass antenna may be a good choice too.

-Fred KA9VAW

... --

Date: 3 May 94 01:15:00 GMT
From: agate!howland.reston.ans.net!vixen.cso.uiuc.edu!moe.ksu.ksu.edu!
kuhub.cc.ukans.edu!paperboy.ids.net!chowda!gary.perry@ucbvax.berkeley.edu
Subject: Formula for determining
To: ham-ant@ucsd.edu

GS>Is there a formula for determining the optimum distances between the
GS>driven element and the parasitic elements in a yagi beam?

GS>I know the driven element should be a 1/2 wavelength and the
GS>reflector 5% longer and the director 5% shorter in a 3 element beam.
GS>How do I determine the distance between the driven element and the
GS>parasitic elements? What about if the yagi has more than 3
GS>elements, say 7?

Hello George, If i remember right, the spacing between elements should
be between .15 and .25 wavelengths at the operating frequency of the
antenna. The spacing you choose will also determine the front to back
rejection and also the gain of the antenna. As for multi element
antennas, the same spacing can be used. Hope this is of help to you.
Gary

Gary Perry 05/02/94 21:15

* CmpQwk #UNREG * UNREGISTERED EVALUATION COPY

Date: 3 May 1994 16:37:55 -0700
From: ihnp4.ucsd.edu!library.ucla.edu!psgrain!news.tek.com!cascade.ens.tek.com!
not-for-mail@network.ucsd.edu
Subject: Formula for determining
To: ham-ant@ucsd.edu

In article <940502215817986@chowda.com> gary.perry@chowda.com (Gary Perry) writes:

>GS>Is there a formula for determining the optimum distances between the
>GS>driven element and the parasitic elements in a yagi beam?

>

>GS>I know the driven element should be a 1/2 wavelength and the
>GS>reflector 5% longer and the director 5% shorter in a 3 element beam.
>GS>How do I determine the distance between the driven element and the
>GS>parasitic elements? What about if the yagi has more than 3
>GS>elements, say 7?

Several factors come into play with the spacing of parasitic elements.
The reflector spacing has a significant effect on front-to-back ratio.
The first director effect the feed point impedance and also is suppose to
affect the coupling of the directors to the driven element (gain and pattern).
Wider spacing is suppose to also increase the bandwidth of a yagi, lower
Q I suspect. Check out William Orr's Beam Antenna Handbook for an indept
analysis of beams.

Terry, KI7M

Date: 3 May 94 19:15:24 GMT
From: agate!howland.reston.ans.net!cs.utexas.edu!convex!news.duke.edu!news-feed-1.peachnet.edu!umn.edu!uum1!kksys.com!edgar!nmmc!cgc.NMMC.Com!
chrisc@ucbvax.berkeley.edu
Subject: HB9CV
To: ham-ant@ucsd.edu

In article <9405021421.AA32068@hal6000.thp.Uni-Duisburg.DE> rafal@hal6000.THp.uni-
duisburg.DE writes:

>From: rafal@hal6000.THp.uni-duisburg.DE

>Subject: HB9CV

>Date: 2 May 94 15:21:19 GMT

>Hi,

>Does anybody know how antenna HB9CV can be fed with 50-ohm coax?

>Thanks in advance fo any suggestions. Mike

I typically attach the coax shield to the point where the front element is
affixed to the boom, and then attach the coax centre to the gamma(?) feed at
the same point (i.e. where it takes a 90 degree turn very close to the front
element/boom junction) via a 20pF (or so) trimmer capacitor, then trim for
minimum VSWR.

Chris

--

Chris

Chris Cox W0/G4JEC
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Europeans consider 100 miles a long way.
Americans consider 100 years a long time.

Date: Tue, 3 May 1994 19:10:20 GMT
From: darwin.sura.net!rsg1.er.usgs.gov!news.cs.indiana.edu!noose.ecn.purdue.edu!
constellation.ecn.purdue.edu!wb9omc@seismo.css.gov
Subject: Idea, 10-10 members....
To: ham-ant@ucsd.edu

I'd like to gauge the interest among members of 10-10 International who
are on the Internet for a group, possibly called:

rec.radio.amateur.1010

The purpose of the group would be multiple:

- 1) to help disseminate information of general interest to 10-10 members who have access to Internet.
- 2) to help 10-10 members set up skeds, nets and other communications events.
- 3) to help develop interest in not only 10-10 International but to maintain interest in 10 meters in *spite* of the current lull in the band.
- 4) to help develop computer operating aids for 10-10 contests and paperchasing.
- 5) to serve as one focal point for 10-10 members to discuss the organization, contest rules, awards rules, etc.
- 6) other future purposes realted to Amateur Radio and 10-10.

I think that emailing me would probably be preferred to clogging up a number of newsgroups with "me too!" kinds of mail.

If you are interested or have a *brief* thought on the subject, please email:

wb9omc@harbor.ecn.purdue.edu

flames and/or mail bombs will be ignored, deleted, /dev/null'ed, etc. :-)

If interest seems positive enough, I will make some contacts with the officers of 10-10 to find out in what ways, if at all, they would like to make contact and maintain contact with such a newsgroup.

73

Duane, WB9OMC

Date: Tue, 3 May 1994 09:22:29 GMT
From: cds8604!forth!whiting@uunet.uu.net
Subject: kites <--> antennas ?
To: ham-ant@ucsd.edu

I used a stable 6 foot kite many years ago to support a 500 foot vertical antenna for 160m. This was fed against

a system of 120 quarter-wave radials, in a location close to the sea (North Wales). The kite stayed up for 24 hours, despite there being no wind discernable at ground level for part of the time.

How did it work? - well condx were lousy, but on DX the vertical was significantly better than the dipole we also used. If the full radial set were not used, it would have been much easier to erect too. Don't know about performance in that case.

73

Neil, G4BRK

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-----  
| Neil Whiting - Cadence Spectrum Services - Northern Europe |  
|  
| Email:   whiting@cadence.com                               |  
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Date: 3 May 94 16:34:38 GMT  
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!noc.near.net!news.delphi.com!  
usenet@ucbvax.berkeley.edu  
Subject: Vertical Antenna Recommendations?  
To: ham-ant@ucsd.edu
```

John Kane <jkane@netcom.com> writes:

>I know that the following antennas exist:

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> Butternut   HF-9VX  
> Cushcraft   R7  
> Cushcraft   AP8A  
> Hustler     6-BTV  
> Hygain      DX-88  
> MFJ         1796  
>
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>If you are spending your own money, what would you buy?

I would buy the R7 every time. There is much debate over How it works, but not much over how well. I believe that they have a buch of satisfied customers, also, try to find one used???? not likely, the sign of customer satisfaction.

n1qdq
humble opinion generator

Date: 3 May 94 09:00:43 -0600
From: ihnp4.ucsd.edu!swrinde!cs.utexas.edu!howland.reston.ans.net!darwin.sura.net!
atlas.tntech.edu!jmg@network.ucsd.edu
Subject: Vertical Antenna Recommendations?DIR
To: ham-ant@ucsd.edu

I would recommend the Gap Vertical.. have had one for a while, a
very satisfied ham recommended it to me (my elmer) works very well

73

Jeff, AC4HF

Date: 3 May 94 12:02:33 GMT
From: agate!ihnp4.ucsd.edu!usc!elroy.jpl.nasa.gov!ncar!asuvax!pitstop.mcd.mot.com!
mcdphx!schbbs!mothost!lmpsbbs!NewsWatcher!user@ucbvax.berkeley.edu
Subject: Y'all are a shy bunch, aintcha'?
To: ham-ant@ucsd.edu

In article <2pslcp\$24he@whale.st.usm.edu>, wwatkns@whale.st.usm.edu
(William Matt Watkins) wrote:

> Surely ALL of you didn't fail to see the sarcasm in my last post where
> I asked advice on constructing a directional antenna. Did you?
>
> So what's the deal? Are you afraid to associate yourselves with
> someone who is ignorant of antennadom? Sorry, but if I knew
> very much about antennas I wouldn't be here asking for advice, now
> would I?

Nope, you asked for it and here goes:

>
> So, let's try it again from scratch. How do I make an antenna
> for an AM or FM radio that is highly directional?

Why don't you tell us what the PROBLEM is, rather than your solution of a
directional antenna. If you already know the answer you don't need our
help.

Classical directional antennas for the AM band will require huge amounts
of space, depending on the performance parameters you dictate for forward

gain and F/B ratio. Keep in mind that the AM band runs from 200 to 600 meters, so you build one full size antenna per station frequency. As an alternative you can use the Yagi-Uda formulas to design a single multi-element antenna that is a compromise on all frequencies. The longest element is 1131 feet, boom length for 24 elements would be somewhere between 5 and 8 miles, depending on whether you design for maximum forward gain or minimum sidelobe content. AM stations are vertically polarized, so you'll have to mount the boom at least 1/4 mile above ground. Rely on the contributions of other netters and the FAA to figure out the boom size, a satisfactory rotator system, and supporting structure.

>
> Follow-ups, e-mail or collect calls accepted.

Watch out there, this gets read worldwide, so the calls could be rather costly!

>
> I hereby formally invite anyone who reads this to respond.

Done!

>
> God will smile upon you if you respond.

No smiles required, just keep lightning away from MY antenna systems.

>
> Thanks, Wm. M. Watkins
> (wwatkins@whale.st.usm.edu)

--
Karl Beckman, P.E. <The difference between stupidity and >
Motorola Comm - Fixed Data <genius is that genius has its limits.>

Amateur radio WA8NVW @ K8MR.NEOH.USA.NA NavyMARS VBH @ NOGBN.NOASI
The statements and opinions expressed here are not those of Motorola Inc.

Date: Tue, 3 May 94 00:14:09 -0500
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!noc.near.net!news.delphi.com!
usenet@network.ucsd.edu
To: ham-ant@ucsd.edu

References <2p3k6s\$1rd@chnews.intel.com>, <2p31lp\$k3s@vixen.cso.uiuc.edu>,
<hI7tDKw.cecilmooore@delphi.com>t
Subject : Re: Calling all balun experts

this is wb4lgi i can tell you a real sob story about a antenna and a balun
some years ago i bought a telrex beam .. when i put the antenna up the
swrhorrible. it took me a year to figure out what the problem was.It turned out
that the balun was defective. a small hole was left in the plastic case.
and water went right in. it cost me \$75 to replace that balun. I will
never use telrex products again.

End of Ham-Ant Digest V94 #131
